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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,525

11/14/2003

Carl de Marcken

09765-036001

2223

26161 7590 09/24/2007  
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EXAMINER

VETTER, DANIEL

ART UNIT

PAPER NUMBER

3628

MAIL DATE

DELIVERY MODE

09/24/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/714,525	<b>Applicant(s)</b> MARCKEN ET AL.	
	<b>Examiner</b> Daniel P. Vetter	<b>Art Unit</b> 3628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/3/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Status of the Claims*

1. Claims 1-76 were previously pending in this application. Claims 1, 16, 19-21, 36, 40-41, 63, 68 were amended in the reply filed July 3, 2007. Claims 1-76 are currently pending in this application.

### *Response to Arguments*

2. Applicant's amendments overcome the objections made to claims 16-17, 20, 36-37, and 40 and they are withdrawn.

3. Applicant's arguments filed July 3, 2007 have been fully considered but they are not persuasive.

4. Applicant argues on page 14 of the remarks with respect to claims 1 and 21 that "Jones determines segments of the trip and finds fares that can be used between the segments" but does not "determine any properties of fares, nor uses constraints derived from those properties in the process of generating itineraries." This is unpersuasive because the plain meaning of the term "constraint" is a restriction. Jones teaches in ¶ 0048 that "the system reviews rules and restrictions . . . to find allowable travel dates for the best fares that comply with the rules and restrictions . . . ."

5. Applicant argues on page 14 of the remarks with respect to claim 2 that "Jones does not show constraints on flights. Rather, Figure 5 shows constraints on the user query." This is unpersuasive because the user queries themselves are on flights.

6. Applicant argues on page 15 of the remarks with respect to claims 14 and 34 that "Jones neither at those passages nor elsewhere determines constraints, as claimed." This argument is unpersuasive for the reasons stated above with respect to claims 1 and 21. Applicant further argues on page 16 of the remarks that in ¶ 0043 Jones "neither describes nor suggests 'constraints are restrictions on flight origin and destination.'" However, this cited paragraph of Jones explicitly states: "Routing rules

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226 place restrictions on the cities and routes that may be used for planning an itinerary" (emphasis added). Therefore, this argument is unpersuasive because the teachings at least in ¶ 0043 of the reference meet the plain meaning of the actual language used in the claim, and applicant has not clearly and distinctly pointed out any deficiencies with respect to this particular teaching.

7. Applicant's argues on pages 16-17 of the remarks with respect to the rejection of claims 16, 17, 20, 36, 37, and 40 that "Jones 302 cannot be reasonably construed to teach both pricing of itineraries without considering constraints and pricing of itineraries considering restraints." This argument is unpersuasive because Jones teaches the claimed limitations of amended claims 16, 20, 36, and 40 (as well as unamended dependent claims 17 and 37) at least also at ¶ 0060; wherein Jones discloses generating additional itineraries without considering previous constraints on date, airline, etc. Furthermore, as stated below in the rejection under § 112, second paragraph, it is unclear what relationship these constraints not considered for the additional itineraries have, if any, with the constraints considered for the original itineraries.

8. Applicant argues on page 17 of the remarks with respect to claims 51 and 57 that "Jones does not derive or determine constraints derived from fares." This argument is unpersuasive for the reasons stated above with respect to claims 1 and 21.

*Claim Rejections - 35 USC § 112*

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 16, 17, 20, 36, 37, and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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11. As amended, claims 16, 20, 36, and 40 recite "generating additional itineraries from flights without considering constraints." It is unclear if these constraints are the same constraints previously set forth and considered in the corresponding base claims, or if they are different constraints that are not being considered for the additional itineraries along with the previous constraints that are considered for the original itineraries. Accordingly, the scope of these claims is vague and indefinite as the public is not properly apprised of what would constitute infringement.

12. Claims 17 and 37 contain the same deficiencies as claims 16 and 36 due to similar limitations set forth within them and through dependency and, as such, are rejected for the same reasons.

*Claim Rejections - 35 USC § 102*

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-8, 12, 14-15, 17-28, 32, 34-35, 37-46, 51-55, 57-61, 63-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones et al (2002/0111935).

As per claims 1, 21.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);

determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306);

generating itineraries from flights using the constraints, see (310); and

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pricing the itineraries, see figure 6 (600).

As per claims 2, 22, 42, 52, 58.

Jones et al ('935) further discloses the constraints are on flights, see figure 5 (Flights).

As per claims 3, 23, 43, 53, 59.

Jones et al ('935) further discloses the constraints are on itineraries, see paragraph (0017).

As per claims 4, 24, 44, 54.

Jones et al ('935) further discloses the fares are fares between endpoints of trip segments, see figure 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 5, 25, 45, 55.

Jones et al ('935) further discloses fares are fares between points connected by single flights to endpoints of trip segments, see figure 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 6, 26.

Jones et al ('935) further discloses itineraries for a complete trip, see (0017) and 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 7, 27.

Jones et al ('935) further discloses providing itineraries for each trip segment, see (0017) and 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 8, 28, 46, 60.

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Jones et al ('935) further discloses the constraints are fare routings, see figure 5 (LAX to MIA) and (0037) and (0043).

As per claims 12, 32, 61.

Jones et al ('935) further discloses the constraints are restrictions on individual flights, see (0037) and (0043).

As per claims 14, 34.

Jones et al ('935) further discloses the constraints are restrictions on origin and destination, see (0037) and (0043).

As per claims 15, 35.

Jones et al ('935) further discloses the constraints based on price, see figure 3 (308).

As per claims 16, 36.

Jones et al ('935) further discloses pricing of additional itineraries without considering constraints, (0060).

As per claims 17, 37.

Jones et al ('935) further discloses pricing of itineraries without considering constraints, returning priced itineraries, (0060).

As per claims 18, 38.

Jones et al ('935) further discloses restricting pricing of itineraries based on constraints used to produce the itineraries, see figure 3 (306).

As per claims 19, 39.

Jones et al ('935) further discloses restricting pricing of itineraries is based restrictions on the endpoints of fares considered during pricing, see figure 3 (310).

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As per claims 20, 40.

Jones et al ('935) further discloses pricing of itineraries without considering constraints and with considering constraints, returning priced itineraries, see figure 3 (302), (306), (318); (0060)

As per claim 41.

Jones et al ('935) discloses:

a processor, see figure 1 (12) and (0035);

a memory for executing a computer program product, see (16);

receive trip segments, see figure 3 (300);

determine constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306);

generate itineraries from flights using the constraints, see (310); and

price the itineraries, see figure 6 (600).

As per claim 51.

Jones et al ('935) discloses:

a computer program product, see (0035);

receive trip segments, see figure 3 (300);

determine geographic and airline constraints derived from fare rules to control the manner in which flights are combined prior to evaluation of fare rules, see (302), (306);

generate itineraries from flights using the constraints, see (318).

As per claim 57.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);



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determining geographic and airline constraints derived from fare rules to control the manner in which flights are combined prior to evaluation of fare rules, see (302), (306);

generating itineraries from flights using the constraints, see (318).

As per claim 63.

Jones et al ('935) discloses:

a computer program product, see (0035);

receive trip segments, see figure 3 (300);

determine constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306), (323);

generate itineraries constrained by multiple constraints that are derived from a diverse set of fares, see (310); and

return at least some of the generated itineraries to the user, see (318).

As per claims 64, 69.

Jones et al ('935) further discloses multiple airlines, see figure 3 (303).

As per claims 65, 70.

Jones et al ('935) further discloses multiple origins, see figure 6 (connecting service) and multi-airport cities (0039).

As per claims 66, 71.

Jones et al ('935) further discloses multiple destinations, see figure 6 (connecting service) and multi-airport cities (0039).

As per claims 67, 72.

Jones et al ('935) further discloses multiple origin-destination pairs, see figure 6 (connecting service) and multi-airport cities (0039).

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As per claim 68.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);

determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306), (323);

generating itineraries constrained by multiple constraints that are derived from a diverse set of fares, see (310); and

returning at least some of the generated itineraries to the user, see (318).

As per claim 73.

Jones et al ('935) further discloses fares are filtered based on properties of the fare rules, see figure 3 (308).

As per claim 74.

Jones et al ('935) further discloses fares fail if aspects of the fare's rules are violated, see figure 3 (308).

As per claim 75.

Jones et al ('935) further discloses aspects of the fare's rules are effective and discontinue dates, see (0048).

As per claim 76.

Jones et al ('935) further discloses aspects of the fare's rules limit at least one of travel dates and travel times, see (0048).

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*Claim Rejections - 35 USC § 103*

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 9, 13, 29, 33, 47, 50, 56, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of Tanner (WO 01/59590).

As per claim 9, 29, 47.

Jones et al ('935) discloses carrier schedule data as raw schedule data and choosing among carriers, see (0039) and figure 3 (303), but does not disclose the constraints are fare carrier

Tanner ('590) teaches the constraints are fare carrier, see figure 1 (Airline: All) for the benefit of giving the customer the choice to limit the search to a preferred airline.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow one constraint to be fare carrier for the benefit of giving the customer the choice to limit the search to a preferred airline.

As per claim 13, 33, 50, 56, 62.

Jones et al ('935) discloses origin and destination, see figure 5 (504 and 506), and carrier schedule data as raw schedule data, see (0039) and choosing among carriers, see (0039) and figure 3 (303), but does not disclose the constraints on airline, and origin and destination triples.

Tanner ('590) teaches the constraints are fare carrier, see figure 1 (Airline: All) for the benefit of giving the customer the choice to limit the search to a preferred airline.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow one constraint to be fare carrier for the benefit of giving the customer the choice to limit the search to a preferred airline.

17. Claims 10, 30, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of official notice.

As per claim 10, 30, 48.

Jones et al ('935) does not disclose the constraints based on global fare indicator.

Official Notice was taken and considered admitted prior art that it is old and well known in the travel arts to add a new airline product to increase offerings to customers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace.

18. Claims 11, 31, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of the Travel Gazette.

As per claim 10, 30, 49.

Jones et al ('935) does not disclose the constraints based on fare maximum permitted mileage.

The Travel Gazette teaches pricing according to maximum permitted mileage as a new airline product to increase offerings to customers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace.

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*Conclusion*

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Vetter whose telephone number is (571) 270-1366. The examiner can normally be reached on Monday through Thursday from 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOHN W. HAYES  
SUPERVISORY PATENT EXAMINER